

# National Institute for Certification in Engineering Technologies (NICET)

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## **DANTES Test Centers' Authorization**

The National Institute for Certification in Engineering Technologies (NICET) authorizes military installations with DANTES test centers to administer the NICET certification examination for engineering technicians.

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## **Background**

NICET was established in 1981 by the National Society of Professional Engineers to bring together the Institute for the Certification of Engineering Technicians and the Engineering Technologist Certification Institute.

NICET provides a nationally recognized and accepted procedure for recognition of qualified engineering technicians and technologists.

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## **Purpose**

Purposes of NICET include:

- Serving as an examining body to evaluate the qualifications of those who voluntarily apply for certification. The evaluation process includes:
    - Personal recommendations
    - Written examinations
    - Verification of the applicant's work experience, competency, and knowledge.
  - Granting and issuing certificates in several grades as evidence of satisfactory attainment.
  - Maintaining a registry of holders of certificates.
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## Description

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### Description

The majority of nationally applicable certification programs provide individualized job-competency based nondiscriminatory certification that can be interfaced with education and training resources and a variety of personnel systems.

Special committees composed of technical and administrative persons familiar with the identified fields develop specific certification requirements and work element descriptions for the various technical specialty fields.

Examination committees for each identified technical specialty are responsible for specific content structure of the testing program. All committees are organized so that contributions from engineering practitioners in education and industry provide assurance of realistic and current technical content and criteria.

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### Technician Specialty Areas

The **Technician** specialty areas using the concept of job task competency are:

<b>Technician Specialty Areas</b>
Building Construction/Water and Wastewater Plants
Construction Materials Testing – Asphalt, Concrete, and Soil
Fire Protection – Automatic Sprinkler System Layout
Fire Protection - Special Hazards Systems Layout
Fire Protection - Fire Alarm Systems
Geotechnical – Construction, Exploration, and Laboratory
Industrial Instrumentation
Land Management and Water Control - Erosion and Sediment Control
Transportation – Highway Construction
Transportation – Highway Design
Transportation – Highway Maintenance
Transportation – Highway Materials
Transportation – Highway Surveys
Transportation – Highway Traffic Operations
Transportation - Bridge Safety Inspection
Geosynthetics Materials Installation Inspection – nine subfields
Low Voltage Electronic Communication Systems – Audio Systems
Underground Utilities Construction/Water and Sewer Lines

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## Description, Continued

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### Other Technical Areas

Other areas that have not been completely converted to the concept of job task competency are:

Other Technical Areas
Architectural and Building Construction Engineering Technology
Civil Engineering Technology
Electrical--Electronics Engineering Technology
Industrial Engineering Technology
Mechanical Engineering Technology
Electrical Power Engineering Technology
Telecommunications Engineering Technology

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## Examination Format

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### Examination Format

Examinations required for certification are either:

- Work-element type, or
  - Two-part type
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### Work-Element Examination

The Work-Element examinations are:

- Open-book examinations associated with the concept of job task competency.
- Multiple-choice tests in which a pass or fail score is determined for each work element. Applicants must earn 60 percent of all the points possible for the questions on an element to receive a passing score.
- Assembled by NICET for individual technicians and contain questions only on topics related to the work elements selected by the technician.

Applicants write the specifications for their own examinations by identifying the work elements on which to be tested. They must choose a minimum of five elements and no more than 34 elements for a given examination sitting, since only the work elements selected by the applicant are included in the examination.

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## Examination Format, Continued

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### Supervisor Qualifications

Certification at a particular level is based in part on passing a specified minimum number of work elements and verification by the applicant's immediate technical supervisor that the applicant has actually performed each identified work element satisfactorily.

**If the verifier does not meet the above qualifications, contact the NICET office for instructions.**

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### Two-Part Examination

The Two-Part Examinations are open-book examinations associated with the technical fields that have not been completely converted to the concept of job task competency. The examination is in two parts.

- The Part A examination is a 3-hour multiple-choice examination that is the same for all technical fields and contains three sections of 30 questions each in:
  - Communication skills
  - Mathematics, and
  - Physical science.
- The Part B examination is also a 3-hour multiple-choice examination, but contains a separate version for each of the broad technical fields listed on page III-29-3. Each Part B examination consists of two sections:

Section 1	Section 2
25 questions on basic technical concepts in the specific field	20 questions* on specific technical aspects in the field the applicant selected

**\*The examinee chooses the 20 questions from a greater number at the time of testing.**

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## Examination Format, Continued

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### Questions Weighted

Questions contained in the two-part examination are differentially weighted as follows:

Type of Question	Points
• Communication Skills	1 point per correct answer
• Mathematics	2 points per correct answer
• Science	2 points per correct answer
• Basic Technology	2 points per correct answer
• Specialized Technology	5 points per correct answer

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### Passing Scores

Passing scores on two-part examinations are based on the total weighted scores on each part of the examination.

**Applicants must score a minimum of 80 weighted points on Part A and a minimum of 80 weighted points on Part B to receive a passing score.**

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## Examination Subject Matter

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### Applicant Chooses Elements

Since the work element examination subject matter is directly related to the applicant's choice of elements, the applicant must be familiar with the work element descriptions. Work-element descriptions are contained in the individual program manuals prepared for each of the technical specialty fields listed on page III-29-2.

**Prior to applying for certification, applicants need to have a copy of the program detail manual for the desired technical field(s). Program detail manuals can be downloaded from NICET's web site ([www.nicet.org](http://www.nicet.org)) for free or ordered at a cost from NICET, using a copy of the order form on page III-29-13.**

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### Subject Matter is Fixed by Institute

The two-part examination subject matter is fixed by the Institute. The topics covered in the examinations can be downloaded from NICET's web site. They are also listed in the NICET publication "Introduction to NICET."

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## Application Process and Procedure

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### Application Process

To obtain an application for the NICET certification examinations:

Step	Action
1	<p>Either the applicant <b>OR</b> the Test Control Officer (TCO) may download the appropriate materials from the NICET web site (<a href="http://www.nicet.org">www.nicet.org</a>) or request by using a copy of the order form.</p> <p><b>Call 1-888-IS-NICET (between 9 a.m. and 4 p.m. Eastern time) for answers to procedural questions or leave a message after hours.</b></p>
2	<p>The applicant completes those areas on the application in the space provided for personal, educational, examination, endorser, and detailed work experience needed to begin the certification process.</p> <p><b>Enter the current military grade where asked for “present employer.”</b></p>

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### Do Not Send Job Descriptions

Do not attach government personnel action forms and job descriptions to the application.

**It is important to fully describe duties and assignments of a technical nature and pertinent to the certification being sought in the work experience section.**

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### Qualify at Lower Level

If NICET judges applicants as unqualified for the certification grade indicated on the application, they may determine the applicant to be eligible for certification at a lower level.

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### Length of Time

The length of time required to complete the process varies according to the:

- Option under which application is made
  - Completeness of information provided
  - Receipt of recommendations, etc.
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## Experience Credit

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### Experience Credit

Experience should be listed by year, employer, and when applicable by job title changes. Each “time block” of an individual’s resume is evaluated separately to determine if it is that of an engineering technician (by NICET’s definition), a craftsman, or otherwise.

**To receive full credit, the engineering technician experience must be progressively more technical and responsible; otherwise, it is pro-rated.**

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### High Level Experience

A maximum of 2 years credit is allowed for high-level craftsman experience related to engineering technician capabilities.

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### Military Service

Military service of a technical nature is evaluated in the same manner as nonmilitary technical experience.

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## Personal Responsibilities

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### NICET Form

Personal recommendations must be submitted on the **NICET PERSONAL RECOMMENDATION FORM**.

**If additional recommendation forms are needed, photocopies of the form are acceptable.**

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### Recommendation Forms

NICET recommendation forms are to be completed by professionals who are familiar with the technical capabilities and background of the applicant.

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## Program Materials and Assistance

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### Materials

NICET information on how to apply for certification and manuals can be downloaded free of charge from the web site. Forms and manuals can be ordered by using an order form at a cost for filling the order.

**Call NICET at (703) 684-2835 (between 9:00 a.m. and 4:00 p.m. EST) or call 1-800-787-0034 at any time to leave a message.**

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### Questions

If the NICET web site (<http://www.nicet.org>) or the NICET publication *“Introduction to NICET”* does not answer questions regarding examination fields, fees, and other concerns, call NICET at 1-800-IS-NICET, between 9:00 a.m. and 4:00 p.m. EST to speak to a NICET staff member.

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## Ordering

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### Ordering Procedure

The TCO should follow the steps below when ordering examinations from NICET:

Step	Action
1	Either the applicant or the TCO obtains the application from the NICET web site or by using the order form.
2	After the applicant has completed the application, the TCO should review it for accuracy.
3	Forward the completed application and examination fee to the NICET bank lock-box address given on the application, along with <u>a letter on official stationery from the TCO</u> . The letter should state that the TCO will test the applicant.

**Applications submitted without a letter from the TCO will be returned to the individual.**

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## Fees

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### Examination Fee

Applicants pay an examination fee when they submit their application.

**Consult the current *DANTES National Calendar of Certification Programs* for the examination fee.**

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### Upgrade Fees

Once certified, individuals become eligible to apply to “upgrade” their certification when the requirements are met to upgrade an application:

If...	Then pay...
No examination is required	\$ 35
An examination is required	\$125

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### Certification Maintenance Fees

Certifications are granted for a maximum of 3 years and NICET Policy #30 governs recertification.

The first time certificant pays a \$30 registration fee at the end of the first and second year. Prior to the end of the first 3 years period, the certificant must apply for recertification. The \$90 recertification fee must be paid in advance.

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### Other Fees

A complete fee schedule is available on the NICET web site at <http://nicet.org>.

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## Administration

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### Military

Administer the NICET CERTIFICATION EXAMINATION FOR ENGINEERING TECHNICIANS to eligible active duty military and Reserve component personnel on an UNFUNDED (EXAMINEE PAYS) basis unless existing military regulations provide otherwise.

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## Administration, Continued

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### Civilians

DANTES test centers may administer NICET CERTIFICATION EXAMINATION FOR ENGINEERING TECHNICIANS to the following civilians on an UNFUNDED (EXAMINEE PAYS), space-available basis according to local command policy and Service regulations:

- retired military personnel
  - military family members
  - veterans
  - U.S. federal employees
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### Instructions

Full and complete instructions for administration of the NICET examinations are provided with each test package.

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## Examination Scoring

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### Scoring

Completed examinations should be forwarded as soon as possible to NICET for scoring.

**Examinations must be returned in the manner prescribed in Part I of this Handbook.**

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### Examinee Notification

Examinees will be notified directly by NICET of their scores. Those who achieve a passing score and meet the certification criteria will receive an approval letter (notice of certification) 8 to 10 weeks after receiving their score report.

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## Refunds

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### Refunds

Individuals unable to sit for the examination for any reason may have the examination rescheduled and, if necessary, relocated by contacting NICET prior to the scheduled test date. **Refunds are not given.**

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## Retesting

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### Work-Element or Single Part

Consult the following chart for retesting:

If examinee tested on...	And...	He or she may...
Work-Element examination	Did not obtain a passing grade for each work element taken	retake each failed work element a maximum of 3 times with a minimum of 6 months between retests.*
Two-part examination	Did not obtain a passing grade on a single part or both parts	retake the single failed part or both parts a maximum of 3 times with a minimum of 6 months between retests.*

\*The fee for each retest is the regular examination fee.

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## Certification Upgrading

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### Application Form

Complete the work experience portion of the application form beginning with the date of the last application for certification.

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## Problems

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### Mail Delay

Any program dependent on mail service will occasionally experience some difficulties. If applications, descriptive information, examinations, scores, or certificates are not received in a timely manner, contact NICET directly.

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## Security

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### Test Loss or Compromise

If a NICET certification examination is lost or compromised, take the following steps:

Step	Action
1	Observe examination security procedures as provided in Part I of this <i>Handbook</i> .
2	Contact DANTES <u>immediately</u> and refer to specific Service regulations for complete procedures. DANTES address is:  <b>DANTES Code 20F 6490 Saufley Field Road Pensacola, FL 32509-5243</b>  <b>DSN: 922-1360 OR CML: (850) 452-1360 FAX: (850) 452-1161</b>
3	If an investigation is required, observe Service regulations and Part VII of this <i>Handbook</i> , “DANTES Test Loss or Compromise Investigation Guidelines.”
4	Provide a copy of Part VII to the responsible investigating official or office.

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## Web Pages

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### Web and E-Mail Addresses

Access the DANTES web pages at <http://www.dantes.doded.mil>.

The DANTES Certification Program E-mail address is [certprog@voled.doded.mil](mailto:certprog@voled.doded.mil).

The NICET web site address is <http://nicet.org>.

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